

LUZIOLA PERUVIANA (POACEAE: ORYZEAE)
PREVIOUSLY UNREPORTED FROM TEXAS AND
A KEY TO TEXAS SPECIES

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Luziola peruviana Gmel. was collected June 28, 1997, while collecting wetland plant specimens at the J.D. Murphree Wildlife Management Area southwest of Port Arthur, Texas. *Luziola peruviana* was identified using Chase (1951), Allen (1975), and Terrell and Robinson (1974) and verified from specimens in the S.M. Tracy Herbarium (TAES).

Luziola peruviana has previously been reported to occur in western Florida (Chase 1951) but specimens were not examined by Hall (1978). Allen (1975) reported the species from Orleans and Plaquemine Parishes in Louisiana. A search of Texas floras and checklists does not render a report for this species (Correll & Johnston 1970; Gould 1975; Hatch et al. 1990; Jones et al. 1997).

A KEY TO *LUZIOLA* IN TEXAS

1. Pistillate inflorescences a raceme or solitary spikelet, axillary; staminate inflorescences a raceme or panicle, terminal; culms 30–100 cm long, slender, floating-trailing; leaf blades 2–4 cm long, 2–4(–5) mm wide, flat, linear to lanceolate *L. fluitans*
1. Pistillate inflorescences a panicle, axillary, diffuse; staminate inflorescences a panicle, terminal; culms 21–35 cm long, slender, ascending; leaf blades 10–12 cm long, 2.5–3 mm wide, flat, linear *L. peruviana*

***Luziola fluitans* (Michx.) Terrell & H. Robinson, Bull. Torrey Bot. Club 101:235–245. 1974.**

For a description see Gould (1975) under the synonym *Hydrochloa carolinensis* Beauv.

***Luziola peruviana* Gmel. Syst. Nat. 2:637. 1791. (Fig. 1).**

Plants monoecious, stoloniferous, aquatic. Culms 21–32(–35) cm long, slender, ascending; nodes often with a dark purple ring below. Leaves caudate; sheaths open, tessellate; ligules 5–11(–12) mm long, membranous, lacerate with 3–several hyaline, acuminate divisions; blades (those subtending pistillate inflorescences) 10–12 cm long, 2.5–3 mm wide, linear, flat, glabrous, margins serrulate. Spikelets unisexual, florets disarticulating at the base; glumes absent. Staminate inflorescences a panicle, terminal, narrow, exserted above leaves; staminate spikelets 5.3–6.5(–7) mm long, hyaline; lemmas 7-veined, erose; paleas 5-veined, sub-equal to lemmas; stamens 6; anthers 3–3.2 mm long, basifixed, yellow, visible through floret. Pistillate inflorescences a panicle, axillary, not exserted above the leaves, diffuse. Pistillate spikelets (1.8–)2.1–2.5 mm long, glabrous, ovoid, acuminate; lemmas 7-veined; paleas 5-veined, sub-equal to lemmas, loosely enclosing mature caryopses.

The species *L. peruviana* was flowering when collected in 0.6–0.75 m of water. The water temperature at the site was 28°C and the salinity 0.2 ppt (fresh water). The associated species included *Panicum repens* L., *Paspalum distichum* L., *Limnobium spongia* (Bosc.) Steud., *Hydrocotyle umbellata* L., *Alternanthera philoxeroides* (Mart.) Griseb., *Ludwigia peploides* H.B.K., and *Ludwigia uruguensis* (Camb.) Hara.

***Distribution.*—**In Texas, along coastal waterways of Jefferson County.

Specimens examined. TEXAS. Jefferson Co.: J.D. Murphree Wildlife Management Area, Big Hill Unit, 28 Jun 1997, *D. Rosen, S. Hatch, J. Thomas, J. Sutherlin* 364 (TAES); *S. Hatch, D. Rosen, J. Thomas* 6746 (BRIT, TAES); J.D. Murphree Wildlife Management Area, Big Hill Bayou, 3.5 mi S of the convergence with Taylor's Bayou, between compartments 4 & 5, 30 Jun 1997, *Thomas* 73 (TAES), associated with *Panicum repens*, *Paspalum distichum*, and *Hydrocotyle umbellata*.



FIG. 1. *Luziola peruviana*. A. Plant. B. Pistillate spikelet. C. Staminate spikelet. D. Staminate inflorescence. E. Ligule. F. Pistillate inflorescence. (A-D and F, Chase 1951; E. J.E. Dawson III).

ACKNOWLEDGMENTS

Financial support provided in part by Texas Higher Education Coordinating Board - Advanced Research Program and the Texas Agricultural Experiment Station.

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